



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,609	07/24/2003	Prasad Dasika	10.049A	7949
22474	7590	10/02/2006	EXAMINER	
DOUGHERTY CLEMENTS 1901 ROXBOROUGH ROAD SUITE 300 CHARLOTTE, NC 28211				AZEMAR, GUERSSY
ART UNIT		PAPER NUMBER		
		2613		

DATE MAILED: 10/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

SF

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/625,609	DASIIKA ET AL.
	Examiner Guerssy Azemar	Art Unit 2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 24 July 2003.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-12 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-12 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 07/24/2003 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 8 – 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

with respect to claim 8:

Applicant's claim "said protection signal being repeated" does not appear to be clear whether "being repeated" means "regenerated" or "looped back". There was no clarification of the word in the depending claims.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by Lauder et al. (20020181037).

(1) with respect to claim 1:

As shown in figures 1A, 10, 14 – 25, Lauder et al. teaches a communication system providing tandem protection in a ring network, the system comprising:

a hub network element (“core hub” in figure 13) having a transceiver transmitting and receiving a signal on said ring network in multiple directions to define a clockwise signal and a counterclockwise signal (Tx1 and Rx1 “clockwise” terminals in “Core Hub” of figure 13) and protection transceiver transmitting and receiving a protection signal on said ring network in a clockwise direction and a counterclockwise direction (Tx2 and Rx2 “counter-clockwise” terminals in “Core Hub” of figure 13, see also page 3, paragraph 0054);

at least one remote network element (102 in figure 1a) in communication with said hub network, and said remote network element including a clockwise transceiver and a counterclockwise transceiver (Tx1, Rx1 “clockwise” and Tx2, Rx2 “counter-clockwise” in figure 13);

said remote network element including a selector for selecting a signal from one of said clockwise transceiver and said counter-clockwise transceiver for transmission to a service interface (1214 in figure 3, “Channel switch”);

said remote network element including a protection component for transmitting and receiving said protection signal generated by said protection transceiver (Tx2 and Rx2 in figure 13);

said protection component operating in a loop back mode when said transceiver is operational, said protection component coupling said protection signal to said

clockwise transceiver and said counter-clockwise transceiver when said transceiver is not operational (page 1, paragraph 0008).

(2) with respect to claim 2:

Lauder et al. teaches the communication system wherein:

said hub network element includes a hub selector (1206 in figure 5) selecting one of said clockwise signal and said counter-clockwise signal for reception at said transceiver (page 5, paragraph 0084).

(3) with respect to claim 8:

Lauder et al. teaches a method for providing tandem protection in a ring network, the method comprising (see figure 1a):

transmitting and receiving a signal on said ring network (100 in figure 1a) in multiple directions to define a clockwise signal and a counter-clockwise signal and transmitting and receiving a protection signal on said ring network in a clockwise direction and a counter-clockwise direction (Tx1 and Rx1 terminal in "Core Hub" of figure 13, Tx2 and Rx2 as protection signal);

at a remote network element, selecting one of said clockwise signal and said counter-clockwise signal for transmission to a service interface (1214 in figure 3);

at said remote network element, transmitting and receiving said protection signal, said protection signal being repeated when one of said clockwise signal and said counter-clockwise signal is present, said protection signal being transmitted to said service interface when said clockwise signal and said counter-clockwise signal are not present (page 10, paragraph 0168, the reference teaches the signal being regenerated,

it reads on the claim where “being repeated” is interpreted as being regenerated and retransmitted).

(4) with respect to claim 10:

Lauder et al. teaches the method further comprising:

Performing an optical-to-electrical conversion prior to transmitting said protection signal to said service interface (page 4, paragraph 0071).

(5) with respect to claim 11:

Lauder et al. teaches the method further comprising:

receiving a signal from said service interface (1216 in figure 3) and transmitting said signal on said protection signal (signal coming from 1216 to 1214 on protection path);

performing an electrical-to-optical conversion prior to transmitting said signal on said protection signal (page 4, paragraph 0071, the reference teaches coupling a optoelectronic switch at the input of the transceiver. In an optical transmission system, once the signal gets converted for switching, it must be converted back to optical prior to transmission of that signal. Therefore coupling an electrical-to-optical converter at the output of the transceiver is inherent).

(6) with respect to claim 12:

Lauder et al. teaches the communication system further comprising:

multiplexing multiple signals from said service interface on said protection signal (602 in figure 4).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 – 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lauder et al. (20020181037) in view of Badr (US 6, 567, 194).

(1) with respect to claims 3 and 9:

Lauder et al. teaches all of the subject matter as described above, except for the communication system wherein:

    said protection signal has a protection wavelength different than a wavelength of said signal.

Badr teaches a the communication system wherein:

    said protection signal has a protection wavelength different than a wavelength of said signal (column 6, lines 50 – 52, in suggesting that the wavelengths don't have to be same, the reference therefore reads on the claim of the applicant).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to use different wavelength for a protection signal than the wavelength of an actual signal as taught by Badr, in the protection scheme taught by Lauder et al. since it would have provided more flexibility in the network.

(2) with respect to claim 4:

Lauder et al. further teaches the communication system wherein:  
said protection component includes an optical add-drop multiplexer for selecting  
said protection wavelength (1206 in figure 5, page 5, paragraph 0084).

(3) with respect to claim 5:

Lauder et al. teaches the communication system wherein:  
Said optical add-drop multiplexer includes an optical-to-electrical converter and  
input switch coupled to an input of said clockwise transceiver and to an input of said  
counter-clockwise transceiver (page 4, paragraph 0071, the reference talks about  
protection switching, which in the case of the bi-directional ring network topology means  
switching from a clockwise to a counter-clockwise transmission, and the reference also  
teaches an optoelectronic switch, which converts the signal from optical to electrical and  
then performs the switching operation. Therefore the reference reads on the claimed  
invention).

(4) with respect to claim 6:

Lauder et al. further teaches the communication system wherein:  
said optical add-drop multiplexer includes an electrical-to-optical converter and  
an output switch coupled to an output of said clockwise transceiver and to an output of  
said counter-clockwise transceiver (page 4, paragraph 0071, the reference teaches  
coupling a optoelectronic switch at the input of the transceiver. In an optical  
transmission system, once the signal gets converted for switching, it must be converted  
back to optical prior to transmission of that signal. Therefore coupling an electrical-to-  
optical converter at the output of the transceiver is inherent).

(5) with respect to claim 7:

Lauder et al. further teaches the communication system wherein:

Said protection component includes a multiplexer disposed between said output of said clockwise transceiver and said output counter-clockwise transceiver and said output switch (602 in figure 4A, all signals are multiplexed onto one fiber).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guerssy Azemar whose telephone number is (571)270-1076. The examiner can normally be reached on Mon-Fri (every other Fridays off).

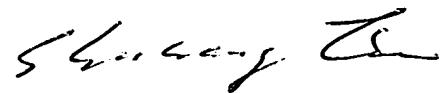
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Liu Shuwang can be reached on (571)272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Guerssy Azemar

08/24/2006

SHUWANG LIU  
SUPERVISORY PATENT EXAMINER



SHUWANG LIU  
SUPERVISORY PATENT EXAMINER